

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18
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Title of Invention	High Deposition Rate Sputtering
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Application Number: 10/065739
Confirmation Number: 7509
First Named Applicant: Roman Chistyakov
Attorney Docket Number: ZON-003
Search string: (4588490 or 5015493 or 5083061 or 5286360
or 5718813 or 5728278 or 5733418 or 5863392
or 6057244 or 6238537 or 6296742 or 6361667
or 6413382 or 6413383 or 6436251 or
20020114897).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
<input checked="" type="checkbox"/>	1	4588490	1986-05-13	Cuomo et al.		204	298
<input type="checkbox"/>	2	5015493	1991-05-14	Gruen		427	38
<input type="checkbox"/>	3	5083061	1992-01-21	Koshiishi et al.		315	111.81
<input type="checkbox"/>	4	5286360	1994-02-15	Szczyrbowski et al.		204	298.08
<input type="checkbox"/>	5	5718813	1998-02-17	Drummond et al.		204	192.12
<input type="checkbox"/>	6	5728278	1998-03-17	Okamura et al.		204	298.11
<input type="checkbox"/>	7	5733418	1998-03-31	Hershcovitch et al.		204	192.11
<input type="checkbox"/>	8	5863392	1999-01-26	Drummond et al.		204	192.12
<input type="checkbox"/>	9	6057244	2000-05-02	Hausmann et al.		438	706
<input type="checkbox"/>	10	6238537	2001-05-29	Kahn et al.	B1	204	598.04
<input type="checkbox"/>	11	6296742	2001-10-02	Kouznetsov	B1	204	192.12
<input type="checkbox"/>	12	6361667	2002-03-26	Kobayashi et al.	B1	204	298.11
<input type="checkbox"/>	13	6413382	2002-07-02	Wang et al.	B1	204	192.12
<input type="checkbox"/>	14	6413383	2002-07-02	Chiang et al.	B1	204	192.13
<input checked="" type="checkbox"/>	15	6436251	2002-08-20	Gopalraja et al.	B2	204	298.12

US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
<i>1</i>	1	20020114897	2002-08-22	Sumiya et al.	A1	427	569

Signature

Examiner Name	Date
<i>Rodney W. D. et al.</i>	<i>2/11/04</i>

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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/065,739
		Filing Date	11/14/2002
		First Named Inventor	Chistyakov
		Group Art Unit	1753
		Examiner Name	McDonald
		Attorney Docket Number	ZON-003
Sheet	2	of	3

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	BOOTH, ET AL., The Transition From Symmetric To Asymmetric Discharges In Pulsed 13.56 MHz Capacity Coupled Plasmas, J. Appl. Phys., July 15, 1997, Pgs. 552-560, Vol. 82 (2), American Institute of Physics.	
	C2	BUNSHAH, ET AL., Deposition Technologies For Films And Coatings, Materials Science Series, Pgs. 176-183, Noyes Publications, Park Ridge, New Jersey.	
	C3	DAUGHERTY, ET AL., Attachment-Dominated Electron-Beam-Ionized Discharges, Applied Science Letters, May 15, 1976, Vol. 28, No. 10, American Institute of Physics.	
	C4	GOTO, ET AL., Dual Excitation Reactive Ion Etcher for Low Energy Plasma Processing, J. Vac. Sci. Technol. A, Sept/Oct. 1992, Pgs. 3048-3054, Vol. 10, No. 5, American Vacuum Society.	
	C5	KOUZNETSOV, ET AL., A Novel Pulsed Magnetron Sputter Technique Utilizing Very High Target Power Densities, Surface & Coatings Technology, Pgs. 290-293, Elsevier Sciences S.A.	
	C6	LINDQUIST, ET AL., High Selectivity Plasma Etching Of Silicon Dioxide With A Dual Frequency 27/2-MHz Capacitive RF-Discharge.	
	C7	MACAK, Reactive Sputter Deposition Process of Al ₂ O ₃ and Characterization Of A Novel High Plasma Density Pulsed Magnetron Discharge, Linkoping Studies In Science And Technology, 1999, Pgs. 1-2, Sweden.	
	C8	MACAK, ET AL., Ionized Sputter Deposition Using An Extremely High Plasma Density Pulsed Magnetron Discharge, J. Vac. Sci. Technol. A, July/August 2000, Pgs. 1533-37, Vol. 18, No. 4, American Vacuum Society.	

Examiner Signature		Date Considered	2/11/04
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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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		Filing Date	11/14/2002		
		First Named Inventor	Chistyakov		
		Group Art Unit	1753		
		Examiner Name	McDonald		
Sheet	3	of	3	Attorney Docket Number	ZON-003

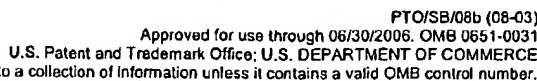
OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>pm</i>	C9	MOZGRIN, ET AL., High-Current Low-Pressure Quasi -Stationary Discharge In A Magnetic Field: Experimental Research, Plasma Physics Reports, 1995, Pgs. 400-409, Vol. 21, No. 5, Mozgrin, Feitsov, Khodachenko.	
	C10	ROSSNAGEL, ET AL., Induced Drift Currents In Circular Planar Magnetrons, J. Vac. Sci. Technol. A., January/February 1987, Pgs. 88-91, Vol. 5, No. 1, American Vacuum Society.	
	C11	SHERIDAN, ET AL., Electron Velocity Distribution Functions In A Sputtering Magnetron Discharge For The EXB Direction, J. Vac. Sci. Technol. A., July/August 1998, Pgs. 2173-2176, Vol. 16, No. 4, American Vacuum Society.	
<i>pm</i>	C12	STEINBRUCHEL, A Simple Formula For Low-Energy Sputtering Yields, Applied Physics A., 1985, Pgs. 37-42, Vol. 36, Springer-Verlag.	

Examiner Signature	<i>McDonald</i>	Date Considered	2/11/07
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(Use as many sheets as necessary)

Sheet	1	of	1
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Complete if Known

Application Number	10/065,739
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First Named Inventor	Roman Chistyakov
Art Unit	1753
Examiner Name	Rodney Glenn McDonald
Attorney Docket Number	ZON-003

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NON PATENT LITERATURE DOCUMENTS

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

1

of

1

Application Number

Complete if Known

10/065,739

Filing Date

11/14/2002

First Named Inventor

Chistyakov

Art Unit

1753

Examiner Name

Rodney G. McDonald

Attorney Docket Number

ZON-003

NON PATENT LITERATURE DOCUMENTS

[illegible]

**Examiner
Signature**

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